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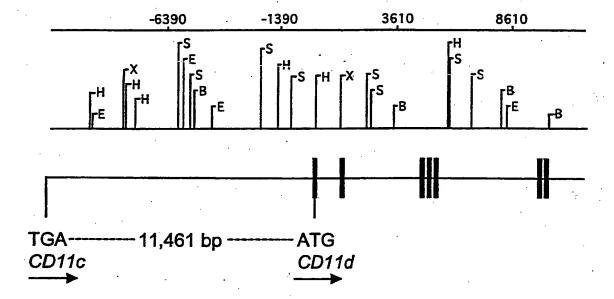
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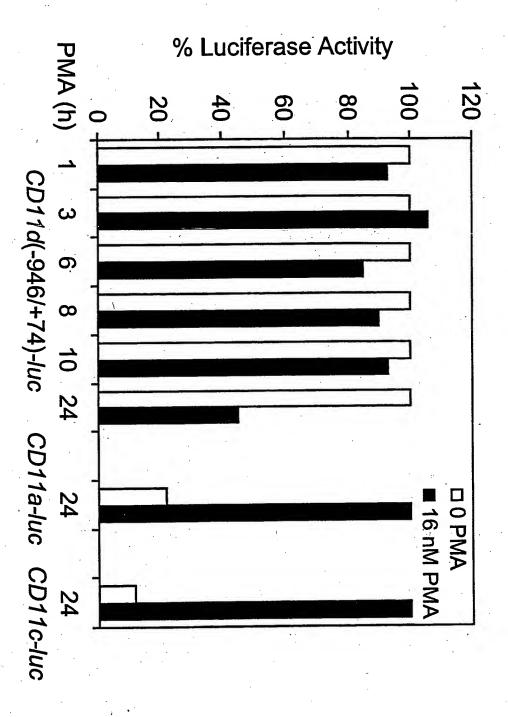


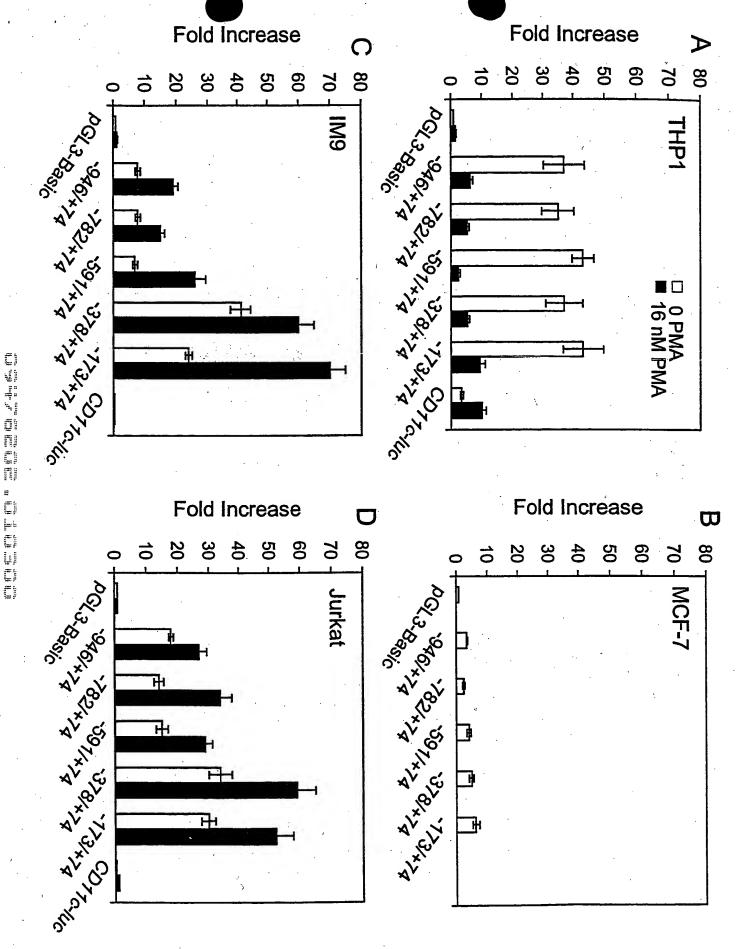


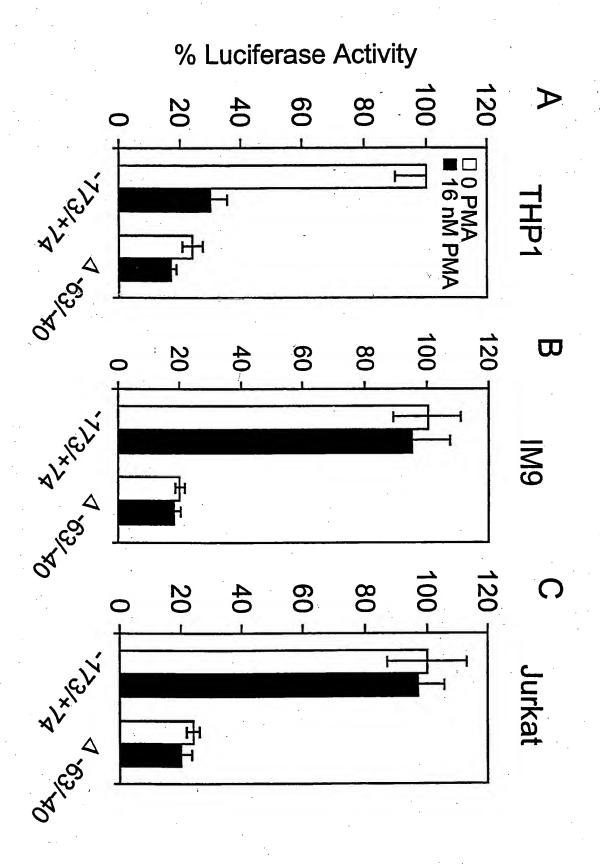
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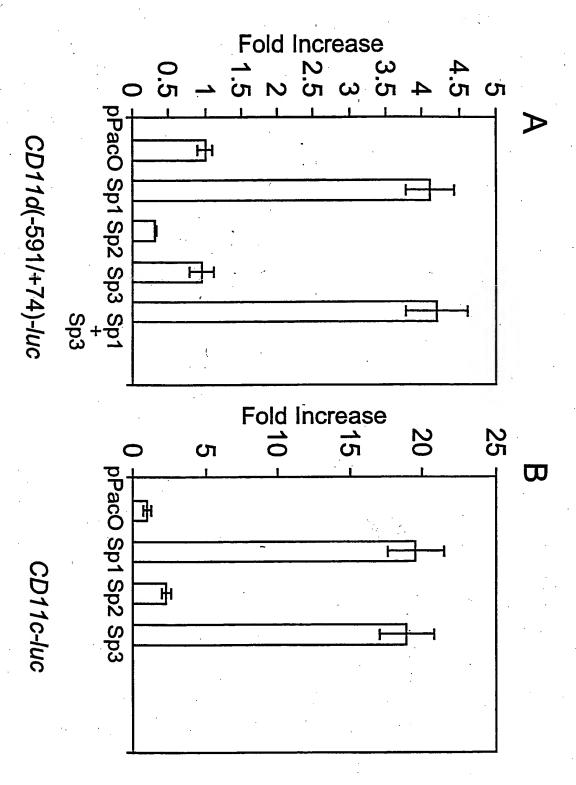


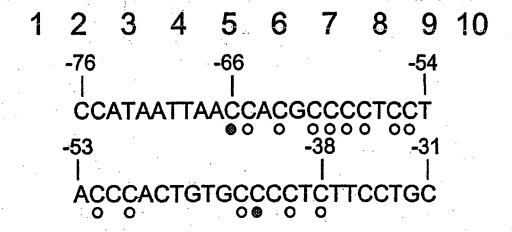
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-10061

GGCTGGTGCC GATGGTAAGC TGGTGGAGCT GTCGGGTGGA GGGGGCATAG AATAGAGAAG GGACAACCTC -9991 CAGTGGCTAC TTTTCCACCT GGAAAGGTCT CTGGAGTGAC CAATACTCAC AAGCGTTTCC TACAAGTCCT -9921 AGGATGTGTT GAAGGGCACA CTGTCTGCAT ATAGTGAGTG ATTGAAGAAC ATGTTGGGGT CCCACATTGA GAGCTGCTGC CCACAATAAG GTCATTCTTG CTATTATGCC ACCATCCTGG CATAAAGTTC ATCATGGTGC -9781 TTGGCACTGA GCTGGGGGCC TCACAGGACA AGCCATTCCT GACCTCGGAG TGACGCCACT GCAGCTATCA -9711 CCAGCAAGGG ACCCGGGCCG TGTGGATGTT TCAATTAGAA AAACAGAAGG GAGGCAGTTG AGTGATTTGA AGGGAAGATG GAAAGTGGCC CTTTACCTCC AGCCAAAAAT GTCTGTCCTA TACATCAGCA GAGGCTCCAA -9571 AATCCCTGTG GATTTTGAAG CTTTTGAGTC CCCAGGATGA CTAATTATTA TGCAGTTTCC TCAGAAAGGG -9501 AATCAGAAGA TAAGGCTTTG TAAGAATTCA GCCCTAATGG CTGGGCACAG TGGCTCATGC CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGAGGATT GTTTGTGCTC AGAAATTTGA GACCACCCTG GGTAATATAT -9361 TGAAACCTTG TGTCTACAAA AAAATTTAAA AATTACCCAG GCATGGTGGC ATGTGCTTGT AGTCCCAGCT -9291 ACTTGGTAGG CTGAAGCAGG AGGATCACTT GAGCCTGGGA GGTTGAGGAT ACAGTGAGCT GTGATTTGGA -9221 CCACCACACT CCAGCCTGGG CAACAGAGAA AGATCATGTC TCAGAAAAAA AAAAAAAAAT TGACCCTAGA -9151 GTGGTGTTTC TCAAAATGTG TTCCACGAAC CACTGGTGGT CAATGATGGT CTTCTAAGTG GAAGGTTTTA GAGAAAAAGA GCAAGAAACC CATACATCTC AAACATTTGA AACTAGTGAT TTGCACAGAA ATAGTGTTGT -9011 GGCCTTAATA ATTGTGTGGC ACACGGACTC CAGGGACTAC AGTGGGTTCT TGTCTAAATT CAGGCAACAA -8941 GTTGTTATTT TCTATTTAT TTTATTATTA TTATTTTTTG AGATAGTCTC ACTTTGTCTC CCGGGCTGGA -8871 GTGTAGTGGC ACGATCTCGG CTCAACGCAA CCTCTGTCTC CTGGGTTCAA GTGATGCCTC TGCCTCAGCC -8801TCCCAAGTAG CTGGGAGTAC AGGGGCGTAC CACCATGCCC ATTTTTATTT ATTTATTTT GAGACAGAGT -8731 CTCGCTCTGT CACCCAGGCT GGAGTGCAGT GGCATGATCT TGGCTCACTG CAACCTCCGC CTCCCAGGTT CAAGTTCAAG CGATTCTCCT GCCTCAGCCT CTGGAGTAGC TGGGATTACA GGCAGGCACC ACCATTTCCA -8591 GCTAATTTTT GTATTTTAG TATAGATGGG GTTTCACCAT GTTGACTAGG CTGGTCTCGA ACTCCTGACC -8521 TCATGATCCG CCCTCCTCGG CCTCCGAAAG TGCTGGGATT AGAGGTATGA GCCACTGTAC TTGGCCGACA AGGTGTTATT TTCTGATATT CTTCCTTTGT GTGTTATTGT GTACATTTGT TACATTTGCA TTTTCAGGGT -8381 TGGCTATTGT GTTGCATTAG ATCCCCGAAT CACAAAATGG ATCAATGGCT CAAAAGCATG GAAGTTGTGA -8311 TTAAAAACTA ATCTAATTGC TACAATTTAC AATAATGTCA TCAAAGTCAA TATTGACTTT TAAATATTGA CCCCAGTGCA CGTATAGTAT AGACATGCÁT ACCGGAATAA GTGATTGTGA GCCAAAACCC GAAAATATCT -8171 AGAAGGTATT ATACTCCCTG ACAGGTAGGT TGTATTGGTT CTGACATGTA TTTGTCCCTA GTGTGCTGCC CATTCTGAAA CTTTATCAAA CAGTCGCATG AACCTCTGAA AGCTTTTGTG TTATTTCTT ATTTATTTAT -8031 TTATTGAGAT GGAGTCTTGC TCTGTCGCCC AGGCTGGAGT GCAGTGGCAT CATCTTGGCT CACTGCAACC TTTGCCTCCT GGGTTCAAGT GATTCTCCTG CCTCAGCCTC TTGAGTAGCT GGGATTACAG GCGCGCACCA -7891 CCACGCCCAG CTAATTTTG TATTTTAGT ATAGACGGGG GTTTCACCAT GTTGGTCAGG CTGGTCTCGA · -7821 ACCCCTGACC TCATGATCTG CCTGCCTCAG GTAAAGCAAT AGAGATTCTT AGAACAACTG CTACATGTAG CTTTCCTATT CAAAAGTGAT TAGTGTTGTC ACCGAATACA GAGGAGACAG CAAAACCACA GTGACATAAA TCAAAGGTGC TTTTTAAAGT AGCAAAAGTA GGTACAAGTC ACATAATTTC CAAGAAGCTT GTAGAAATGG ופרר CAGTAGAGTT CATACCTGCT ATTGAAAGGT TGCTTTTGGC TGCAAATAAT AGAAAAAAAC AAAAGCATGT -7541 AAGAGCAGAC AGAAGACCTT TACTCTGCAA GAGGTTCAGG TGCAGGTTAG TGTTTAATGC AGAGTCTCAG -7471CATTGACAGA TTCTTTCTGA TCTTCCAATT GATCGTCCTT GCGGGGGGGG TTTAGTTCTT TCCCACTGAC -7401

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GCACTCAGGC TAAAGAGGCT GATGCTTGCA GGGCAGTATT CACAGAGCAC ACGGTAGTTC ACGGGATGCC -6001 TCTCACCCTT GACTCAGTGC TTAAGAAAGG AGGGAAAATG GTGAACATGA TCAAATCATG GCCATTGCCT -5931 ATTCATCTTT TCAGTGTTGT ATGGAGGAAT AGGCAAGTAG GAGATTGCTT TTCACATTAA TGTCAAAGAG -5861AAAGATAGTT ACTTGGAACT TAAAAAAATT AATTGTGATA AAATATACAT AACATAAAAT TTACCATCTT AACCATTTT AAGTATAGCC AATCTCAAGA GCTCTTTCTA TCTTGTAAAA CTGAAACCCT ATACCCATTA -5721AACAACTCCC AATTCTCCCC TTTCCCTAAC TCCTGGCAAC CACAATTCTT TCTGTCTCTA TGAATTTGAC TGCTTTGGCA TGTCATAGAA ATAGACTCAT ACAGCATTTG TCTTTTTGCG ACTGGCATAT TTTGCTTAGC -5581 ATAATGTCCT CAAGGTTCAC CCATGTGGTA GCATGTGTCA GAATTCCTCT CCTTTTGAAG GCTGAATAAT ATTCCATTGT GTGTATATAC CACGTTTTGT TTATCCATTT GCCCATCAAT GGGCATTTGG GTTGCTTTTT TTGCCTCTCA TGAATGATGA ATATGGGCGC ACAAATATCT CTTCAAGACC ATGCTTTCAA TTCTCTTGGG -5371TATACACCCA GAAGTGGAAT TGCTGAATCA TATGGTAATT TTTTTTTTT TTTGAGACAG AATCTTGCTC -5301TGTTGCCCAG GCTGGAGTGC AGTGGCACAA TCAGAGCTCA CTGCAGCCTT GGTCTTCTGG GCTCAAGCGA TCCTCTTGCT TCAGCCTTCC GAGCTTCTGG GACTAAAGGT GTGTGCCATC ATGCCTGGCT AATGTTTTAA AAACGTTGCC AGGCATGGTG GCTCGTGCTT GTAATCCTAG CACTTTGGGA AGCTGAGGCA GGTGGATCCC CTGAGGTCAG GAGTTTGAGA CCAGCCTTGC CAACATGGTG AAATCCCGCC TGTACTAAAA ATACAAAAAT -5021 TAGCTGGGTG TGGTGGCATG TGCCTGTAGT TCCAGCTACA GGCAGGAGAA TTGCTGGAAC CTGGGTGGCA GAGGCTGCAG TGAGCCGAGA TTGCACCACT GCACTCCAGC CTGAGTGACA GAGTGAGACT CTGTCTCAAA AAAAAAAA ATTTTAGAGA TGGTGTCTCA CTGTGTTGCC CAGGCTGGTC TTGAACTCCT GCCCTAAAGT GATCCTCCTG CTTCCGCCTC CCAAAGTGCT GGGATTACAG GCATTAGCCA CCATGCCTGG CCTAGCTAAA

-4741



-383

GTGTCTATTG ACAGCCTGGC TTCCCTCAGC GATCATTATG ATGATCAAAG TAGATGAATA GGTAAAATTC -3341AATGCAAATA TTCCAGGGCA TCTAAATCCA TACCCCAAAT GGGAAAAGGG GAGAATTGGA AGCCAGCAAT -3271TTGAACACAT TACTATGGAT GTATTTTCT CATGCGGGGG AAAAAGTGAT TTGGAGAGAG AGAATTATGA -3201ATGCATGTGA AGAATAAAGC CAAATTTCCT GGGAGGAGGG GAAGACCAGG AGAAACAAAA CCAAATCCTG GCTGTGGCCT CTAAGGCATG GGGACCTGGA GTTATGCTCT CCAGGCAGAC ACAGCTCATT CTGGAGAAAG -3061GCTGCAAAAA TATTCTCCTT CACATTGATT TGAAAACAAT TATTAAATTC TTGTTTTCTT ATTTATCTAA - 3013 NY87 GTGTAACTTT TTAAAACTTA CTGAGAGAAG ACGGGCACGG TGGCTCACTG CTGTAATCCA GTACTTTGGG -2921 AAGTCAAGGC AGGTGGATCA CCTATGGTCA GGAGTTCGAG ACCAGCCTGG CCAATATGGC AAAACCCCGT CTCTACTAAA AATACAAAAA TTATCAGGTG TGGTGGTGTG TGCCTGTAAT CCCAGCTACT CGGGAGGCTC -2781AGACAGGAGA ATCACTTGAA CCTGGGAGGC AGAGGTTGCA ATGAGCTGAG ATTGCACCAC TGCACTCCAG -2711CCTGGGCGAC AGAGCAGGAC TCCATCTCAA AATAAAAATT AATTGATTAA TTAATTAAAA ATTTACTGAG -2641 AGCTGGTGGT TCCTTTAAGG GTGGAGCCGC CATCAAGTCC CCAGAGGATG CCCTGAATTT GGGGGCATCA -2571CCTTCAGCTG CTGTGGACTC TGAGCCTTGG CAGCTCCAGC TCCAGGCCTG GGAGAAAGAT GATTTCCTGG CAGCGTGCAG TGATTGTGAG CATTTGACTA CCTTACTGCA TTTTGCCCTT ATCAKTGCTC TCCAAACATG AGTGGAAAAC AAAAAATTTT GCTGAGACAA GCGATAATAC GAGTTAGGGA AAGTTGGAGA ATTTTATAGT -2361 TGCTGATATC AGCAAATCGT GAGTTTCAAG CACTAACTTA CAGAAGGAAG TCCAAAATTA AAGGGGATAT AGAAATGTGT AAAAGATGAG GTGTGGTGAA GATGGAGAAA ATGAAGAGCT CTTTAAATTT CTGAATTATG AAGAATCACC AACAAATTAT TTTGTGGTTC CAAATACAGG GAGAAGTTCA CAGATCCACA GAACTGATGA -2151CAGGGTGCGG CCAGCCACAA ACCTTTCAGC ACAAGAGGGA GAAGGCTGCC GCTCCACTTT GCCTGGGCAG -2081

TCTTTGTAAG	GCAGTAGATA	AGTCAGCCTC	GAAGTTAGCA	ATCACAGCCC	TCGGCTCGGT	TTCCTGCAAG
GGCATCGTTA	ATGCATCACA	ATTAATTTCT	TCTGTCCATT	AAATGTCAGC	TCTCAAGTAA	-2011 ATTGATGTAA
AATTTTTGTA	TAGAAAACTA	TTTCATATTA	TTTGCACTTG	ATGTTTAATT	ACATTTTAAA	-1941 TGTTTTGTTT
GTTTCATTTT	GTTTTGTTTT	TGAGACAGAG	TCTTGCTCTG	TTGCCCACGC	TGGAATGCAG	-1871 TGGTGTGATC
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TTACAGGCGT	GCACCACCAT	GCCTGGCTAA	TCTTTGTATT	TTTAGTAGAG	ATGGGGTTTC	-1731 ACCATGTTGG
CCAGGCTGGT	CCCGAACTCC	TGACCTCAAG	CTATACACYT	GCCTCAGCCT	CCCAAAGTGC	-1661 TGGAATTACA
GACATAAGCC	ACTGTGCCCA	GCCAAATGTT	TTAAATAATT	GTCACATATA	TATACAAAAT	-1591 AATTTATGTT
ATAGGTAGGG	ATCTTGTTAT	ATTTTAACCT	TCAAAGTATA	TTCCTAAGCT	TTTTATTTAT	-1521 TTTTTATTTT
TTATTTATTG	AGACAGTCTT	GCTCTGTCGC	CCAGGCTGGA	GTGCAGTGGC	GCAATCTCGA	-1451 CTCACTGCAA
ACTCTACCTC	CTGGGTTCAA	GCGATTCTCC	TGCCTCAGCC	TCCTGAGTAG	CTGGGATTAC	-1381 AGGTGCGCAC
CACCATGCCC	AGCTAATTTT	TGTATTTTTA	GTAGAGACGG	GGTTTCACCA	TATTGGCCAG	-1311 AGCTGGTCTC
AAACTCCTGA	CCTCAGGTGA	TCCATCCACC	TCAGCCTCTC	AAAGTGCTGG	GATTATAGGT	-1241 GTGAGCCACT
GCGCCTGGCC	TATTCCTAGC	СТТТТАТАТА	TAGACCTTTT	TCTTTTTCAC	ATTTTAAAGG	-1171 AACTTTTATG
TTTAATCATG	GAATATTTCA	AACATACAGA	AAAATCACAG	ААААТАААТА	ACAACCACTC	-1101 ATTTATCTTC
TCCCCAACCC	CATGTAATAA	ATATTAAAAT	ATTGTGTTAA	ATGCTAAATT	TAACACATGC	-1031 TAAAGGTTCC
TGGCTGGATG	TGGTGGCTCA	CGCCTGTAAT	CCCAGTACTT	TGGGAGGAGG	AGGTGGGAGG	-961 ATTGCTTGAG
TCCAGGAGCT	CGAGACCAGC	ATGGGCAACA	TAGTGCGATC	TCGTCTCTAC	AAAAAACAAA	-891 AAAATTAGCT
GGGCATGGTG	−9℃ GTGTGCATCA	GTAATCCCAG	TGACTGGGAG	GCTGAGGTGG	GAGAATTGCT	
						751

AATTTGAGGC TGCAGTGAGC CCTGATCATG CCACTGCATT CCAGCATGGG CGACATAGCA AAACTTGTCA AAAAAAAAA AAGTTTCCTC TCTGCCCCAC CATAGACAAC CACTCTTCTG ATTTCTATCT TCGTAGATGA API ATTTTGCCCA TTCTCTTGTA TATGAAAGGA ACCAGACATT AGGCATTCTG GTGTCTGGTT TCTTTCACTT AAGATAAAAT TGAGTTAACC TGTATTGTTG TACAGAACTG CAGTTTGTTC TTTGTTATTT ATTGTAAAGA CAGGGTCTGG CTATGTTGCC TAGGCTGGTC TCGAACTGTT GGCCTCAAGC AATCCACCTG CCAAGCTCTG -401 GGACCACAGG CATGAGCCAT GGCATCTGAT CKGTAGTTTG ATCTTATTTC TTGCTGAGTA GTAGCCCATG -331GCATGACTTT ATTATTTTGG GTGTCCATTC TCCTCTGGAG GGGCTCTGCT TTTTGAAACC ACACCTGGC -261 CTAGCTCCCC_TTCTCCCTGC CTCTCTGCAG GCTCACATCC ACATGCCAAG ACCTCTGCAG CCATTCTGCT TCCTGTCCTT CCACTCCTGT GGGACCTCAG AGAGCTACGG GGCTCCCTGG GTACCAACTG GCTCCTGAGG <u>GÒTGGT</u>CTTC TGGGAGAAGG AAGCCAGGTC CCTGCAGGTT GTG<u>GA</u>GGGGG ACAGAATGAG -51 GGTTTTTCCC CAGGATGTTG TTGGC CTG CCCCCACTTC TGTTCCATAA TTAACCACGC CCCTCCTACC Sp1/5,3 CACTGTGCCC CTCTTCCTGC TGTGTGGAGG CCCTGAATCA TTATTTTAAC TACCCCCTGG GAGGGTGAGC ACCTTCTGTG CTCTGTCCCC AACCTTCCAC TTCCCCTCAA CGCGCTGCTC AGGC TCCTTCTTCT CAGTGGTAAG TGGGGCCAGG GTGCTGGGGA GAAGCTTGGA GGAGTTCTGA GGGGACTCCA 230 TCTGGGAGGG CAGGCTGGGG GCTGGTGGTC GGCTCCAACC ACTCTTATGA GGAGCTGAGG CAGGGGAGTG 300 CTTCATGTGC GAGTGGCCCG GAGTCAGTAG AGTGTGACCT GAATGAAGAG GGGCTCAGGG GCTGTGCTCA GGTGGCGACT AAGCTACCTC TCCAGCTGGC TATGTTGTCC CAGGCTTCCC TGCTCCCACT CATGGAGTCC 440 CTGGTGTGGG TGACAGAGGT CTCCCCAGCC TCCCCCGGGA GTGGAAGGCC ACAGAAGCCA CCAGGGAGGG 510 GGAAAGGTTG GACATCACCT CCCTGGGCCT NNNNNTTCCC CCAAGTCCTG ACTGCACGTA GGGAAGAGGC

580

CCCCTGCTGA AAACTGCATC AGAGTCACAT TCACGTGCCA TCAAAAATCA GGCTTGGCTG GGTGCGGTGG 650 CTCATGCTTA TAATCCCAGC ACTTTGGGAG GCCGAGATGG GCGTATCCCC TGAGGTCAGG AGTTTGTGAC 720 CAGCCTGGCC AACATGGTGA AACCCCATCT TTACCAAAAA TATAAAAATT AGCCGGGCAT GGTGGCGTGC 790 ACTTGTAATC CCAGCTACTT GGGAAGCTGA GGCAAGAGAA TCGCTTGAAC CCAGGAGACG GAAGTTGCAG 860 930 AAAAAAAAA AAAAAAAAAA AAGAGGCTGG GAGGTCCTAG GGATTGGGGC TTCTTTAACT CCCAGCCTCC CCGCCCACCA AATATTCCTC AGTOCTOGCT TCTTATCATG GATTCAACCT GGATGTGGAG GAOCCTACGA

CCGCCCACCA AATATTCCTC AGTOCTACGA TCTTATCATG GATTCAACCT GGATGTGGAG GAOCCTACGA

CCGCCCACCA AATATTCCTC AGTOCTACGA TCTTATCATG GATTCAACCT GGATGTGGAG GAOCCTACGA

CCGCCCACCA AATATTCCTC AGTOCTACACA TCTTATCATG GATTCAACCT GGATGTGGAG GACCTACGA

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CCGCCCACCA ACCACA TCTTATCATG GATTCAACCT GGATGTGGAG GACCTACGA

CCGCCCACCA ACCACA TCTTATCATG GATTCAACCT GGATGTGGAG GACCTACGA TCTTATCAACCT GATTCAACCT FTCAGEA CHATCAGGC GGGTTTGGGGT AGAGGGTGGT GCACTTCGGT AGGCCCCACT_THIN? 1140 CACCCTCCTT CCCCAACCTC CACTACATCA AGTCCTGTGG ATGGGTACAC GTGGGTTACC CGAGGGAGGT STCCTGGAGG AAGGCCAGCA GGGGTGAGAA GTCTTCCCTT GGCTCCTTGG AGGCCCTGAC ATCAGCACCT 1280 ATTATTCTCA ATCCCAGGAA AGGCCACAAA ACTCTAGACA AGACCCTACC TTACCTCGGG AGGGAAGCCT 1350 TGAACCTGCC TCCCAGGCAG GGCCCACTTC TTGGGGCCAG TATGGTCACA CAGGGCCCAC ACTCATTAAC 1420 TTTGGAGTTT AATGTTCTGC CCTTGACCTC TTGAAATTCC TGATTATTTT TATTTTTATT TTTACTCCAG 1490 CTCTGTTACC CAGGCTGGAG TGCAGTGGTG CAATCACAGC TTACTGCAGC CTCAAACTCT CGGGCACAAG 1560 TGATCCTCTC ACCTCAGCCT CCTGAATAGC TGGGACCACA GGTGCATGCC ATCATGCCTG TTTTTTGTTT 1630 TGTTTTGTTT TACTTTTAC AGAGATGGAG TCTTGCTATG TTGTCCAGAC TGGCTGAACT CCTGGGCTCA 1700 AGCAATCCTC CTGCCTTGGC CTCCCAAAGT GCTGGGATTA CAGGTGTGAG CCACCCTGTC TTGCCAATTC 1770 TTAAAAATTT TATCTGTGCA TTTGTGTTTT GCAAGTAAAG AATGATGGCA GGGCTGGGCA CCATGGCTCA 1840 CGCCTATAAT CCCAACSCTT TGGGAGGCTG AGGCGGGCAG ATCATCTGAG GCCAGGAGTT TGAGACCAGT 1910

TTGGCCAACA CAGCAAAACC CCATCTCTAC TAAAAATGCA AAAAAAATTA GCCGGGCATG GTGGCAGGCA 1980 TCTGTAATCC CAGCTACTTG GGAGGCTGAG GCAGGAGAAT CGCTTGAACC TGGGAGGTGG AGGTTGCAGT 2050 GAGCCGAGAT CGTGCCACTT TACTCCAGCC TAGGTGACAG AGTGAGACTC CGTCAAAAAA AAAAAGTCAT 2120 GGGAGAAGGG AGATGTACTG GGGGTTTGGA GCCTTAGCTC AGCAGCAGCC CCACCTCCCA CCGCCTCCTG AAGGGTGGTG AAGGGGTATC AGCTGCTGGC TCCCCCACCC ATGTGGGAGC AATGACCGCT GCTACCTTCC 2260 GCCCCTGGCA TGAGCTGGGT AAAGTCAGTT AGGGGCGCTC ACTCTGGGAG TACCCCGAGG GAGTGGGACA 2330 CTACATAGCA AATAAAAAC GTCAGGACAG GTTGAGGAAA GAGAGCAGAA GAAAGGTAAG AGCCCCCCAA 2400 CCCCAAGAGA CCCCACAGTT TTATTCAAA TTGGGACCCA CAAATTATGA ACCTGCCCCC ACTTCCAGGA 2470 GCTCACATTC TCCTGTCCCA GAGAGTTCAA GTCACAATGT GACACAGGTG TCACCAAGGT CTGGGGGGCC CAGGCAGGGA GAGAGCAGAC CCAGGAGGGT TCCATGGAGG AAGTGGTGCT GGCAGTGAGC CCCAGTGGAC 2610 AGGAAGGCTC AGTTGGTCAC GAGGAGCTAT AAGAGGTCAC CGAGCTCCAA CCGCGCACCC CTCTCCCTTC CTCATGTGAC TGGCAGTCTG GGGGGATGGA AGCAAGCACC AGGCACCAGG CTTTTGTTTT TCTTTATTTG 2750 GAAATGTGGT CAACTGAGGT GCACAAATCT GAAAGACCCA ATCTGATAAA GGATACACAT GTGCGTGCCT 2820 GGGTGAGCCC CACCTAGGTC AGCTGCTCCA GTGTCAAATC CCACAGGCAC AGGGCTGCCG TGGACCCCTT CTCATCACCC AACATCCCCA GAGAACCCCT GGTCAGACTT CTGTCACCAT CAGTTTTTTG GGCCACATTT 2960 TAAAAAAAGA ATACATTGGC TGAGTGCAGT GGCTTATGCC TATAATCCTA GAACTTTGGG AGGCTGAGGC GGGTGGATCA CCTAAGGTCA AGAGTTCAAG ACCAGCCTGA CCAATATGGT GAAACCCTGT CTCTACTAAA 3100 AAATACAAAA ATTAGCCTGG CGTGATGGCA GGTGCCTGTA ATCCCAGCTA GCTGGGTGAC TGAAATAGGA 3170 GATTTGCTTG AACCTGGGAG GTGGAGGTTG CAGTGAGCTG AGATCACGCC ATTGCACTCC AACCTGGGTG 3240 ACAGAGTGAA ACTCTGTCTC AAAAAACATA TGGGTTGATG GGTTACACTA AAGTTTTGCT CATCGTTTGT 3310 ATCAGCAGGT TCCAAACTGC TACCTCTCTA GCCAATGCTC AGATTTTCTT CACAAAGCCT TAGGCATCCC 3380 CTGAATCATG ATGCACAGGG ATTGTAGCTT TCTGTAAAGG AGCGGCACCT AGAAGGAACC CTCACATGGC 3450 CATTTAATGA AGCCTTGCTT GGCGCATTAA AATACACCAG TATCTGTCTG CTTTTCTCAC AGACAGGAGA TTGTGGGTAG TGAGAAAACA TTTCCAAAAT TAAAAAACTT TCCCACTCAG GGAGTTTTGC AAATAAACCC 3590 TTGACTCTAC ATAACTATAG ATATAGTTAT GGATCCTAGT ACACTGCTTT ACATTGGCCA ATTGAAATTG CTTATACAAT ATTTAAATTG GTCCAATGAA TTACAGAATC AACTATTTGT TTTGAAAGCA CATGTCTTCA 3730 GGAAATTGTT CCAATTAACT TGAGATGATC TTATTTCTTG GGTGGTTCAA AATAATGGCA ACTCAGAAAC 3800 GCAATGTGCT TACCCATGAT TGGGAAATGC CATTTTGGTC TTTAAATAGG TCTTTTTTT TTTTTTTTT TTTTTTTTT GGTGAATGTT AAAAAGAAAT TTCTAAACAT AAATACACAC ATACGTACTT ATGCACACTC 3940 AAAACCAAAT AAACCCCAGC ATGGCCCCTG GGCATCTGTG AGTTACACTT GGGCCCTGAT TTCTGAATAT TCTGCCAAGT GGCAAATGCC AGGAATTTCC CCCACAGAGT CTCGCTTCCC CATGGAGGGA CACTTCCTCA 4080 (133) CCCCCAAGTG CCCGCTGCTC CCACCCCTCC TGTGGCTGCA GTGACATGGC CATGGTTGTG TCTCCAGACT CETEGEGGA GCACCCETGE AGETGET GC GCCAACCAG ACGEGAEGE TGTATGACTG CGCAGCTGCC ACCEGGATGT GCCAGCCGAT CECCETCAC ACTGAGTGAC CACCTGGGAA TTGGGCCCCT CAACCCTCCT GGACCCAACT GTGCCCCGC TTAGCTTCCA GTCCAGACCT TCCCCGCAAA TGAGTGTGTG CTGTGAGTGA 4290 GACCCCGCGT GTCTGCCCTT GCAGTCCGC CTGACCCCTT CAACATGTCC TTCGGCCTGA CCCTGCCAEC chechachae geeteege tetegag teagtetet eggeeaege eggeteget eggeegege 4500 GTGTTGTTGG GGAGGAGGCT GGGGCTGGGA GTGAAGGAGG AGGGGCTGCT AGGGACTCCT GGCTCACAGG Intron 4 4570

CTTCTGCCTC CAGGCCTGTG GCCGACCCT GCACAGAGTC TGTGGGGACA ACTCATACTC AAAGGGTTCC CTOP TOPOCTOGE CTOCGACATO ATCHACACAGE TOCCOCACGO CACOCCAGGO AGGTCCCTGG TO CAGGCCATGG TTCCCTGTGG AGCACATGCT GGCACTGAGG GTGAGCAGGC GTGAGGCCTG TGTCTGGGCC 4780 CCTGTGCCCT CCCTGGAGGG CCGAGTGTGG CTAGGAGAGA AGCCAGGAGA AGAGGGTGGC TCAGGCAGGA 4850 GCCCTGCTGC TCCAGGGTAG AAGTTCTTTG CAGGGTTTTT CTTTATATTT TTTTCTTTTT AAGACAGGGT 4920 CCCTGCCAGG CACAGTGGCT CAGGCCTGTA ATTCCAGCAT TTTAGGAGGC TGAGGTGGGC GGGATCACCT 4990 5060 ANACAAAATA GCAGGATGTG GTGGTGTGCG CCTGTAATCC CAGCCACTCG GGTAGGCAGA GACAGAAGAA 5130 TCGCTTGAAC CCAGGAGGCG GAGGTTGCAG TGAGCTGAGA TTGTGCCATT GCACTCCAGC CTGGGTGACA 5200 AGAGCAAAAC TCCATCTCAA AAAAAAAAA AAAACAAAAA ACAGAGTTTC TGTCAGGCTG CATGCACCAC 5270 CACACCCTGC TAATTTTTTT GAGACAGAGT CTTGCTCTGT CGCCCAGGCT GGAGTGCAGT GGTGCAATCA TAGCTCACTG CAGCCTCGAA CTCCTGGGCT CAAGTGATCC TCCTCCCTTA GCCTACTGAG TAGTTGGGAC 5410 TGCAGGTACA TGCATCACAC CTGGCTAATT AAAAAAAATG TTTTTGTAGA AATGGGGGTC TTGCTATGTT 5480 ACCCAGCCTG GTCTTGAACT CCTGGGCTCA AGTAATCCTC TGCCACAGCC TCTCAAAGTG TTGGGATGAC AGGCATGAGT CCTTGTGCCT GGCCTGAGGG ATGAAAGTTC TGATGGAGGC AGAGAGGAGC CCCACTGTGC 5620 GGGCTGTAGA GGGCACAGCA TCTTCCAGTT GCCAACAGGT GCATGGCCAC TTCTTGAGTT TCAGAGGAAG 5690 GACCTTAGTG TGGTAAAGAA CGTGGTGAGG AAGATAAATC CATGAGGGAG GTGTTTCTTC TGGATGGTTC 5760 ACTGCTGAGC TTCCAGGATT CCCCAAACTA ACTTTCCTCT CGAAGAGGAG CAAATGACAG GGCTGCGGAA 5830 AATGCGATGT GCAATTTTGT CAGTGCCCAT GTCTTCCACA GAGAACAGGG CCTGGGGACA CCACCATGAC 5900

ATCTCTCTGA GGGTTGGTCT GCATCATGGT GGTTCCCAAG TTTGTTTTCC ATGGGCACCA GGCTTCATTC 5970 CCTTGAAGCT TCATTCCCTC AAAGCCATTC AGTTTCCTCA TTGGTAAAAT AGAGCTCAAT AATCAGGGGG 6040 TTATGAAGGT GAAAGGGATT GAGGTGCATA AAGCACTTGG AACCCTGCCT GGCACATAGT ATGTGATAGC CCCTCTGACC CATCTTCCAG CTGGGGACTG CATGCTGGGA CTGGGAGGAA GATACAGGCA AACTGTCTCA 6180 TCTGCCGTGT GAGAGGGAAT GCCAGGGGCC GCTCAGGGTG CTGACCGAGG GTGGGGCTTC AGACCAGAGA 6250 GGCCATGATG ACAGGCATGC TGGGCCTTTA GACAAAGGTG GAGCAGCAGC AGAAACATTA CCAGAGCAAA 6320 TGGTGAGGGT GGAGTCTATG GAGGGGACCA AGGGAAGGGG GAAGGGACAT CCAGGGTTCT TGGGGGGACC 6390 GTGCCCAGCC TGAGATGTCT GTGAAGCTAG GTTAGGGAGG TGGCACTTAA AAACAAGGGG TAAATGTCTT 6460 CTCACAGCCA TCCGTGGAAC TCATGAGGTG GGATGCCTGA TGCAAATGGG ACTGGAGCAC AAAACTGGTG 6530 CAGGCAAGGG GGGTGTGGGT CCAAGTAGAA GGGACCAGGG TCCACTGAGG ATCACCTGTG TGCCAAGCAG 6600 TGCTGAATAC CTGGTATGAA TCACCTTATT GCATCCTCAC AACATCCTGG GTGGTGGGCA GGCCCATTCT 6670 CATTTTACAG ATATGAAAAC CAAGGTTCAG ATAGATGAGT TCCATCGATA GCAAGAGGCA GAGCCCAGAG 6740 CTTGAGCCAT CCTTGCCTGA TTGGTGGGGT CCTTTTTCAA AAGGATAAGT CCAGGCTTCT GCTAGTGGGA GACCAGGGGA TACAATAAAA AGACCAAGAA ACAGAAGAGA CATTGTGAGA GGATTTGCCA CAGACCTGGC 6880 CTGAGAGAG ATGAGAGGT GGTTTCTTGA CGCAGCTGAA AAAACAGGCA CCACTGCAAG ATGTTGGCTG 6950 CCCAGATGTG GGCAAAAAAC GGGGAGCTCC TGGGGGGGATC TGCAGCCTGC CCCATGGATG TCAAGATTTG 7020 CTGGTGATTG AAGAAGCAGG AAGGAAGTGA CCTTCTGTTT CTCCCCAGCA CCCTTGAAGC ACCAGTGGTT 7090 7160 GAAACCACAG CCCTGTGGTG TGGGCCTCAC ACCTTAGTGC TCTGGTGGCC TGATCTCCCA GTGCCCTGCG 7230

GGCAGCACAG GATGTGGCTG CTGGTGGAGG TACCAACTGG GCCCTGAACA CAGGCCACAC ACCCCCCATG 7300 AGCCTGGGGA CAGCATGAAA AGTCTTATTT GTTCATGTGC ATATGATGTG CCCTCACGAT TGCAGAGTGA ACTCCACAAA CTCTGAGGTC ACTTGGGAAT GTTCTTTTT TTTGAGACGG AGTCTCACTC TGTCGCCCAG GCTGGAGTGC AGTGGCACAA TCTTGGCTCA CTGCAGCCTC CACCTCCCAG GTTCAAGTGA TTCTCCTGCC TCAGCCCCC AAATAGCTAG GATTACAGGC ACCGCCACCA TGCCGGGCTA ATTTTTTGT ATTTTTAGTA 7580 GAGATGGGGT TTCACCATGT TGGCCAGGCT GGTTTTGAAC TCCTGACCTC AAGTAATCCG CCCACCTCAG 7720 CATGGGAGCA TGAAGGGTGG ATGCAATGCA ATCATAACAG AGGCCCAAGG TCAGCACTGG GGTGCTTGCC 7790 TGTCATCCCA GTGCTTTGGG AGGCCGAGGT GAGTGGATCG TTAGAGCCCA GGAGGTTGAG ACCAGCCTGG GCAACATGGC GAAACTCCGT CTCTACAAAA AGATACAAAA ATTAGCCAGG CAAGGTGGTG CACACCTGTA GTCCCAGCTA CTCAGGAGAC TGAGGTGGGA GAATTGCCTG AGCCTGGGGA GGTCGAGGCT GCACTGACCT 8000 GTGATCACAC CACCACACTC CAGCCTGGGT GACAGTGAGA CTCTGCCTCA AAAAAACAAA AAATGAAAAA 8070 ACCAGAGGCC TCAGCCAATG CCTGGGGGGC TCAGAGTGCA GCTGGCCCTT CAGACGCTGA ACCAGTCATC 8140 GGTAAAGGTT TCCTCCAGGG GCAGGAGGTG TCCCAGTGGG CAACAGTTCC CCTCTGCCTA GCGTGATTCC TGGGAAGGGA CTCAGCTCAG AGCCAACTCC ACGTAGCTGG AAATAAGGAC CTCTGACCGA CTGGGGGTAG 8280 GGTGGGGTCT GGGGTGGATC CCTGCCCCAC CCCCACAGCA TCCCTACAGG CATATCCTAC AGGCCTCGAA GGTGCCTGGC ACGTGGTGAG AATGGTGCCA GCGGCTGACC CTGGCAGAGG GCCAGGACTT GTCTCCAGCA 8420 CCCATGTGCG TGTTGCTTTA TCCTTGCAGT GATCCCACGT GGTAGCCACT GATATTACCT TCATTTTACA 8490 GATAGGGACA CTGAAGTCCA GAGAAGTTAA GTAATGTGCC TGAATTCACC AATTAGCACG TGGCTGAGCT 8560 200

GGGGTTTAGC COREGCACAC TGGCTCCAGA ACACGCGCCC TGAACCACTT TGCTAAACAT TCGCCCTTGA 8630 TGCTTGTGGC ACCCCTAGCA TCTGTGTTTA ATGAATATTT GTTGATTAAA TGGATGAGGA GCCCACCTGG 8700 GTCCTGTGTT GTCATCCCTC TCTTTCCAGG CCATGTGGGA GGAAGGGAGC AGGGGGCTGG GGTGGCAGAC 8770 TGGGGCCTCC TCCAAGGAGG GGTCGGAAAC TAGGTGGGGA TGCCAAGAAC AGCCCCCGGG CTCTGTTGAG 8840 (1772) CAGGAGCTGC AGGAGGGGT TGGGCCCCCG CAGTGCATCT CCGATTCCTC CCCATTCCCC CACAGACTGT 8910 CCACATRARE AGATGRAGAT CETCHTGCTG ATTGAGGGCT CTEGRAGGAT TEAGCAARAT GAGTTTAAGC PHQEMDIVFLIDG SGSIDQNDFNG 8980 ACATCHAGEG CITTETCHAN GCTETCHTER GCCACTTTEN GEGCACTENCI ACCCTCGTGN AGACTGGGCN M K G F V Q A V M G Q F E G T D T L CCTGGGGCTG GGGTTTGGGG GACGGGGGAG GCTGGCCTCG GGGAGGCATC CCGGGAGGGG TGGGGGCAGG 9120 CCAGTGAGCC GTGTGTGATG GGGCTGGGGT GGAGAATGAA GCTATGGTCC CAGCACAGGC CCAACTTGAG CCCTGACCTA GGAGGCCCTC TTGGCATTTA ATAATGTATC CAAAAGCTAC AGGAAATACA ATGTTTCTGC 9260 TGTTTAAAAA CATTGAAAGT GTTTAAAAAA TAATTTTGCT ATGGAATTTG ACTGACATAT TTTCTATGTA ACTAATGATT TCTTTTATT ATTTTATTT CCCATAACTA GTGCCTATGT ATGTGCAAAA AAACCCCACT 9400 GTTTTGTTTT TTAAACAGGG TCTTGTTCTG TCATCCAGGC TGCAGTGTGG GGGTGCAATC ATAGCTCACT 9470 GCAGACTTGA TCTCCCAGGC TCAAGTGATC CTCTTTCCTC AGCCTCCTGA GTAGATGGGA CTACAGGTGC ATGCCACCAT GCCTGGCTAA TTTTTAAAAA TTTTTATTGT AGAGATGGGG TCTTGTTATA TTGCCCAACC 9610 TGGTCTCCAA CTCCTGGCTC AAACAACCCT CCCACCTTGG CCTCTCAAAG TGCTGGGATT ACAGGCATGA GTCACTACGC CCAGCCACAA ATTCTTGAGA AGGGAGGAAA TACACAAATT GATTTAATGT GTGATAAAAT 9750 TTTTAAAAAG CTAAGGGTAG CAAATATTGT GGTTGGCAAA GTTATTTTTA ATAAACTGTG AAGGAAATAT 9820 CATTTGGTTT AGATTTTCCA GTTTATATTT TGTATTTTTG GGCCAATGAA TTTTCTTCTC TGGGTTTCAG 9890

THATATATT GRAGGETTE AAAACACATG GGAAATGGTT TGTAAATCCA AAATAATTCC AAAATAAAGT

9960
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AACAATAGTA ACAGGCACTG AGCCCTGGGC CCTCCCCACT GGCCTTTGCA GTTTGCACTG ATGCAGTAGT

CAAAACTCTT CAACATGCAC TTGACGTTCA CGCAATTGCG GACGAGCCCG AGCCAGCAGA GCTTGCTGA

CAAAACTCTT CAACATGCAC TTGACGTTCA CGCAATTGCG GACGAGCCCG AGCCAGCAGA GCTTGCTGA

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